

What is claimed is:

1. A method for migrating a user from a source server module providing a content stream to said user, said content stream divided into a plurality of extents, said method comprising the steps of:
 - 5 determining, for said content stream being provided to said user, a transitional extent defining an appropriate first extent to be provided to said user via a destination server module;
 - 10 determining if said destination server module is capable of providing said transitional extent to said user within a first time period; and causing said destination server module to provide said transitional extent and subsequent extents associated with said content stream to said user.
- 15 2. The method of claim 1, wherein said first time period comprises a transitional extent deadline determining the time at which said transitional extent must be retrieved from a storage device.
- 20 3. The method of claim 1, wherein said second step of determining comprises the steps of:
 - 25 communicating at least said transitional extent including a transitional extent deadline to said destination server module; and evaluating a message received from said destination server module, said message comprising one of a rejection, an acceptance and a modified acceptance of a migration of said user to said destination server module.
4. The method of claim 3, wherein in the case of a rejection of the migration of said user to said destination module, an alternate destination server module is selected.
- 30 5. The method of claim 3, wherein in the case of an acceptance message, said method further comprises the steps of:
 - determining whether said transition extent deadline has passed;

and, in the event of said transition extent deadline having passed, repeating steps (a) through (c).

6. The method of claim 5, wherein in response to said transition extent
5 deadline not having passed, stopping output and sending a trigger message to said destination server module.

7. The method of claim 6, further comprising the step of waiting for a response message from said destination server module; and
10 in response to an error indicative response message, selecting an alternative destination server module.

8. The method of claim 3, wherein in response to a modified acceptance message, said method performs the steps of:
15 selecting a new transition extent in the case of said modified acceptance being appropriate; and
selecting an alternative destination server module if said modified acceptance is inappropriate.

20 9. The method of claim 4, wherein said alternate extent is selected to cause a repetition in content preparation.

10. The method of claim 1, wherein said transitional extent is entered at an extent boundary.
25

11. The method of claim 10, wherein said transitional extent is entered at a packet including an asserted discontinuity flag.

12. The method of claim 1, wherein said transitional extent is determined
30 with respect to a packet offset parameter comprising an asserted discontinuity flag in a header portion of said transitional offset packet.

13. The method of claim 1, wherein said transitional extent is determined with respect to a packet offset parameter.

14. The method of claim 10, wherein said transitional extent is determined with respect to a packet offset parameter comprising an asserted discontinuity flag in a header portion of said transitional offset packet.

5

15. A method for receiving a migrated user, comprising:
receiving a transitional extent identifier, an extent deadline and a content identifier;

10 determining if the identified transitional extent of the identified content may be accessed prior to said extent deadline; and
in the event of a favorable determination, accessing said transitional extent and providing a message indicative of acceptance of said user.

16. The method of claim 15, wherein, in the event of an unfavorable determination:

communicating an alternate transitional extent identifier to a source server module; and
accessing said identified content stream beginning with said alternate transition extent.

20

17. Apparatus, comprising:
a plurality of server modules, each of said server modules having associated with it a respective mass storage device for storing content as respective sequences of extents;

25 a switch, for coupling content streams provided by said server modules to a transport processors, each of said transport processor; wherein at least one content stream being provided to a user by a first server module is caused to be provided to said user by a second server module, an initial portion of said content stream provided by said second server module 30 being defined by a transition;
said first and second server modules cooperating to define a transitional extent representing a first extent of said content stream to be provided by said second server module;

in the case of a migration event, at least one content stream provided by a source server module, said failing server module are migrated to a non-failing server module such that subscribers receiving said content streams receive substantially uninterrupted service.

5

18. The apparatus of claim 17, wherein in response to a failure, over utilization or load imbalance condition, at least a portion of the content streams provided by said server module are migrated to a non-over utilized server module such that subscribers receiving the content streams provided by said failing server module are migrated to a non-failing server module such that subscribers receiving said content streams receive substantially uninterrupted service.

10

19. The apparatus of claim 18, wherein said mass storage device comprises an array of storage devices for storing said content in a striped manner, said content being distributed among said array of devices according to a sequence of extents.

15